IN THE CLAIMS:

Please cancel original claims 1-3, without prejudice. Please also cancel, without prejudice, claims 1 and 2 on the revised pages of the annex to the International Preliminary Examination Report.

Please add the following new claims:

4. (New) A process for establishing a common cryptographic key for n subscribers using the Diffie-Hellman process, comprising:

assigning the n subscribers respective leaves of a binary-structured tree which has a root, n leaves, is of depth $\lceil \log_2 n \rceil$ and has treenodes;

for each one of the n subscribers, generating a respective secret, the respective secret being assigned to the one of the n leaves to which the one of the n subscribers is assigned; and

establishing secrets consecutively in a direction of the root of the tree for all k nodes of the tree starting from the n leaves of the tree across an entire hierarchy of the tree, wherein two already known secrets are combined using the Diffie-Hellman process to form a new common secret, the new common secret being allocated to a common node so that a common cryptographic key for all n subscribers is allocated to a last one of tree nodes, the last one of the tree nodes being the root of the tree.

5. (New) The process as recited in claim 4, further comprising:

adding a new subscriber to the n subscribers of the tree so that there are n+1 subscribers of the tree, the adding step including:

adding two new leaves as successors to a selected one of the n leaves of the tree so that the new tree has n+1 leaves and is of depth $\lceil \log_2(n+1) \rceil$;

assigning the one of the n subscribers to whom the selected one of the n leaves is assigned one of the two new leaves and assigning the new subscriber to another one of the two new leaves, the selected one of the n leaves becoming a common node for the two new leaves; and